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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/519,010

02/24/2005

Orlando Starke

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7222

7278

7590

06/26/2008

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EXAMINER

CAZAN, LIVIUS RADU

ART UNIT

PAPER NUMBER

3729

MAIL DATE

DELIVERY MODE

06/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/519,010

Applicant(s)

STARKE ET AL.

Examiner

LIVIU R. CAZAN

Art Unit

3729

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 7-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/14/2008 has been entered.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. **Claims 11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Higham (US4761960).**

4. Higham discloses the limitations of claim 11. See the discussion below in the rejection of claim 1. Regarding the recitation "each lamination portion presenting ... of a plurality of lamination portions" (last 3 lines of claim 11), it should be noted that the two lamination portions of each lamination element are aligned with each other such that their respective radially internal edges are aligned along a straight line and are adjacent to each other in a lateral direction.

Claim Rejections - 35 USC § 103

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. **Claims 1, 3, 4, 9, and 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Higham in view of Lillie (WO01/73923).

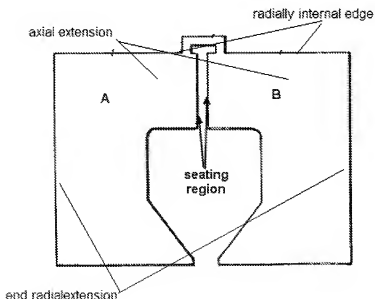
7. **Regarding claims 1 and 9**, Higham discloses providing lamination elements (70, Fig. 7; 47, Fig. 6; A, B, below), each defined by two lamination portions (A, B, below), said lamination portions having part of the internal axial extension of the respective lamination element and end radial extensions (see below); forming two mutually complementary annular assemblies (62, 63, Fig. 4), with the lamination portions of each annular assembly being seated side by side in relation to each other; seating a respective adjacent end portion of a tubular coil (66, Fig. 4) in the interior of one of said annular assemblies; and mounting the other of said annular assemblies to the remainder of the tubular coil, affixing the two annular assemblies to each other, to complete the shape of an annular stack of lamination elements, the two annular assemblies of the lamination elements being affixed to each other in seating regions (see figure below) with mutual fitting.

8. Higham does not disclose providing a rectilinear alignment of each of a plurality of lamination portions presenting a radially internal axial edge, said lamination portions being laterally mutually seated, with their respective radially internal axial edges defining a flat surface; affixing to each other the radially internal axial edges of the lamination portions of the rectilinear alignment of each plurality of lamination portions, to allow only the relative limited angular displacement of each lamination portion around its part of the radially internal axial edge; deforming the alignment of each plurality of lamination

portions affixed to each other to an annular shape, with the respective radially internal axial edges defining an internal cylindrical surface of the respective annular assembly.

9. Lilie discloses forming an annular stator for a compressor by providing a rectilinear alignment of each of a plurality of lamination portions laterally mutually seated, with their respective radially internal axial edges defining a flat surface (see Figs. 2 and 4-7). The laminations are connected together to allow only a limited relative angular displacement, and the stack is deformed to form an annular shape (annular assembly), as claimed. See Fig. 3 and steps a-c on page 3, Ins. 11-23.

10. At the time the invention was made, it would have been obvious to assemble the laminations of the annular assemblies of Higham by the method disclosed by Lilie. One of ordinary skill in the art would have been motivated to do so in order to reduce the number of steps required to form the two annular assemblies of the stator (see page 8, Ins. 8-15 of Lilie for a list of advantages).



11. **Regarding claims 3, 4, and 10**, Higham in view of Lilie as applied to claim 1 disclose substantially the same invention as the Applicant, except for affixing the two annular assemblies of the stator core using an adhesive and allowing the adhesive to cure under tension.

12. It is common knowledge to use adhesives to join two parts and to maintain the parts to be joined under tension while the adhesive sets.

13. Therefore, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to join the two annular assemblies by means of an adhesive as claimed, in order to simply and inexpensively form the completed stator. Other means of joining could include using bolts or welding. Likewise, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize an adhesive to affix the tubular coil to the two annular assemblies, in order to ensure the coil does not move within the stator core.

14. **Claims 5 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higham and Lilie in view of Harter (US20020093269).**

15. Higham and Lilie together disclose the same invention as the Applicant except for the seating region of the laminations of one of the annular assemblies being a recess, the laminations of the other having a complementary triangular projection to be fitted in the recess so as to constitute a self-locating feature.

16. Harter discloses utilizing triangular self-locating features (74, 76, Fig. 2) so as to easily align stacks of laminations to be joined (para. [0024], Ins. 16-19; see Figs. 1-3)

17. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the two annular assemblies of Higham and Lilie with such seating regions, in order to easily align and fit together the annular assemblies.

18. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higham and Lilie in view of Anderson (US3043994).

19. Higham and Lilie together disclose the same invention as the Applicant except for providing the coil with an insulating cover which is injected about the coil.

20. Anderson teaches it is known to do this (see figures; see col. 1, lns. 10-27).

21. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to form such an insulating cover over the coil of Higham and Lilie, in view of the teachings of Anderson. One of ordinary skill in the art would have been motivated to do so in order to protect the coil from damage.

22. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Higham in view of Harter.

23. Higham discloses substantially the same invention as the Applicant, except for the seating regions having a recess or a projection, as claimed.

As discussed above with respect to claims 5 and 15, Harter discloses providing such features.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to provide the laminations of Higham with such a recess/projection as claimed, in order to easily align and fit together the two annular assemblies.

24. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Higham in view of Anderson.

25. Higham discloses substantially the same invention as the Applicant, except for the tubular coil being provided with an insulated cover injected thereon.

26. Anderson teaches it is known to do this (see figures; see col. 1, lns. 10-27).

27. At the time the invention was made, it would have been obvious to one of ordinary skill in the art to form such an insulating cover over the coil of Higham and Lilie, in view of the teachings of Anderson. One of ordinary skill in the art would have been motivated to do so in order to protect the coil from damage.

Response to Arguments

28. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

29. However, it should be noted that the limitation "seating region with mutual fittings" does not define a particular structure. It is deemed that the two flat surfaces of the lamination portions, as can be seen in the figure above, correspond to this limitation, as the two surfaces are meant to come in contact and be seated and fit against each other.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIVIUS R. CAZAN whose telephone number is (571)272-8032. The examiner can normally be reached on M-T 6:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571)272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. Dexter Tugbang/
Primary Examiner
Art Unit 3729

/L. R. C./ 6/20/2008
Examiner, Art Unit 3729